

**WHAT IS CLAIMED IS:**

- 1 1. A computer implemented method for provisioning broadband service in a  
2 Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:  
3 transmitting an authentication request from a modem to a single  
4 configuration domain name over a PPPoE network ; and  
5 receiving authorization from said configuration domain name.
- 1 2. The method of claim 1, further comprising, prior to said transmitting step, the  
2 step of providing a modem that includes a configuration domain name associated  
3 with a configuration Broadband Service Node (BSN).
- 1 3. The method of claim 1, further comprising, prior to said transmitting step, the  
2 step of establishing a PPPoE session.
- 1 4. The method of claim 1, further comprising, prior to said transmitting step, the  
2 steps of:  
3 requesting only a single identifier from a user of a client computer;  
4 receiving said identifier; and  
5 storing said identifier.
- 1 5. The method of claim 4, wherein said transmitting step comprises transmitting  
2 an authorization request containing said identifier and a generic password to said  
3 single configuration domain name.
- 1 6. A method of claim 1, wherein said receiving step comprises acquiring at least  
2 one temporary dynamic Internet Protocol (IP) address.
- 1 7. The method of claim 6, further comprising:  
2 transmitting a configuration request to an Internet Service Provider  
3 (ISP), where said configuration request is addressed from said dynamic IP  
4 address;  
5 receiving full configuration details from said ISP, where said full  
6 configuration details include a static IP address, and where said full  
7 configuration details are addressed to said dynamic IP address; and

8 automatically configuring said modem based on said full configuration  
9 details.

1 8. A system for provisioning broadband service in a Point-to-Point Protocol Over  
2 Ethernet (PPPoE) network, comprising:  
3 a least one client computer;  
4 a modem coupled to said client computer, said modem including a  
5 memory comprising:  
6 instructions for transmitting an authentication request  
7 from a modem to a single configuration domain name over a  
8 PPPoE network; and  
9 instructions for receiving authorization from said  
10 configuration domain name;  
11 a single configuration Broadband Service Node (BSN) coupled to  
12 said modem, where said single configuration domain name is associated with  
13 said single configuration BSN; and  
14 an authentication server coupled to said single configuration BSN.

1 9. The system of claim 8, further comprising:  
2 a Digital Subscriber Line Access Multiplexor (DSLAM) coupled  
3 between said modem and said single configuration BSN;  
4 an Asynchronous Transfer Mode (ATM) network coupled between  
5 said DSLAM and said single configuration BSN; and  
6 a Broadband Remote Access Server (BRAS) coupled between said  
7 ATM network and said single configuration BSN.

1 10. The system of claim 1, further comprising:  
2 multiple Broadband Service Nodes (BSNs) coupled to said modem,  
3 where each of said BSNs is associated with a different domain name; and  
4 an authentication server coupled to each one of said multiple BSNs.

1 11. The system of claim 10, wherein said multiple BSNs are coupled to the  
2 Internet.

1 12. The system of claim 8, wherein said memory further comprises a generic  
2 password.

1 13. A computer program product for use in conjunction with a computer system  
2 for provisioning broadband service in a Point-to-Point Protocol Over Ethernet  
3 (PPPoE) network, the computer program product comprising a computer readable  
4 storage and a computer program stored therein, the computer program comprising:  
5 instructions for transmitting an authentication request from a  
6 modem to a single configuration domain name over a PPPoE  
7 network; and  
8 instructions for receiving authorization from said configuration  
9 domain name.